



Center for Program Design & Evaluation  
at Dartmouth

## Evaluating Dartmouth's Multi-Level Employee Wellness Initiative

Rebecca Butcher, MS, MPH, PT

Lisa Colby, MSW

Karen Schifferdecker, PhD, MPH

Building Healthy Academic Communities Summit

Irvine, CA

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## Dartmouth Context

Diverse work settings

Buildings circa 1700s to 2000s

Academic medical hospital a separate entity

Self-insured employer 



4,300 benefits eligible

47 years average age

The Upper Valley – rural, outdoor lifestyle but disparities common in access & overall health



# Background

## WELLNESS AT DARTMOUTH

[General Health](#) | [Family Health](#) | [Nutrition](#) | [Fitness](#) | [Safety & Preventive Health](#) | [Stress & Emotional Health](#)

### Resources at Dartmouth

[Benefits and Discounts for Employees](#)  
[Annual Employee Wellness Event](#)  
[Become a Wellness Ambassador](#)  
[MOVE IT Challenge](#)  
[FUEL IT Challenge](#)  
[Community Supported Agriculture \(CSA\) Options](#)  
[Biometric Screening](#)  
[Health Risk Assessment](#)  
[Health Coaching](#)  
[Dartmouth Health Connect](#)  
[Geisel School of Medicine Lecture Series](#)  
[Dartmouth-Hitchcock Health Podcasts](#)  
[Weight Management](#)

### Metrics and Tools

[Calorie Tracking Tools](#)  
[Tips to Quit Smoking](#)

### Self Assessment

[Body Mass Index Calculator](#)  
[Estimate Risk of Heart Attack](#)  
[Test your Blood Pressure IQ](#)  
[Diabetes Risk Test](#)  
[Interactive Sleep Quiz](#)

### External Resources

[Mayo Clinic Health Information](#)  
[Cigna Health and Wellness Library](#)  
[The Cleveland Clinic Health Information Center](#)

[Home](#) > [General Health](#) >

### Wellness at Dartmouth Overview

#### Your Path to Well-being Starts Here...

Wellness at Dartmouth is committed to helping employees discover their own path to well-being. Our website is one aspect of a comprehensive approach designed to connect employees with the support they need along their journey. A variety of programs, resources, and health-related campus partners are also here to support you on your path, including:

- Health Coaching
- Annual Health & Wellness Event
- Wellness Workshops
- Dartmouth Health Connect
- \$200 Wellness Benefit
- Employee Discounts
- Health Challenges
- Health Assessment
- Biometric Screenings

#### Good for You! (Good for Dartmouth, too!)

When you commit to well-being, you can...

- « lower your risk of debilitating disease
- « boost your energy level
- « improve your chances of living a longer life
- « enhance your productivity
- « preserve your alertness and mental acuity
- « encourage colleagues to take charge of their own health
- « reduce health care costs
- « build a more vibrant and empowered community

...let's support one another on this journey of health and well-being!



### Quick Links

[\\$200 Wellness Benefit](#)  
[Wellness Workshops & Drop-in Events](#)  
[Health Coaching](#)  
[Become a Wellness Ambassador](#)  
[Tobacco Cessation](#)  
[Health Discounts & Benefits for Employees](#)  
[Who We Are](#)  
[Disclaimer](#)  
[Get Help](#)  
[24/7 NurseLine](#)  
[FEAP Consultation](#)  
[Addictions](#)  
[Submit a Question](#)

### Search this Site

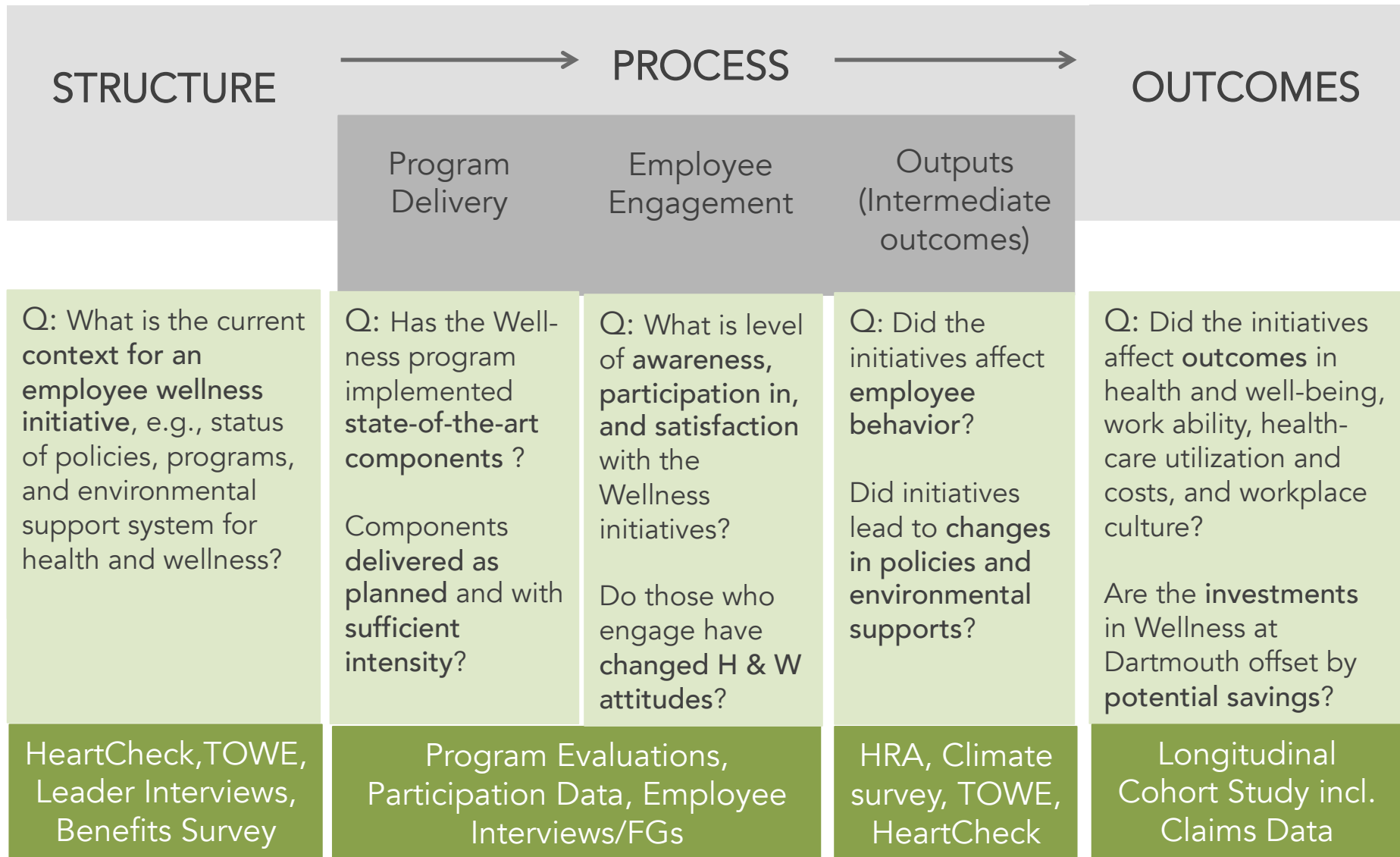
 

### Wellness at Dartmouth

7 Lebanon Street -- Suite 203  
Hanover, NH  
03755-3529  
Phone: (603) 646-3706  
Fax: (603) 646-1108  
Email: [wellness@dartmouth.edu](mailto:wellness@dartmouth.edu)

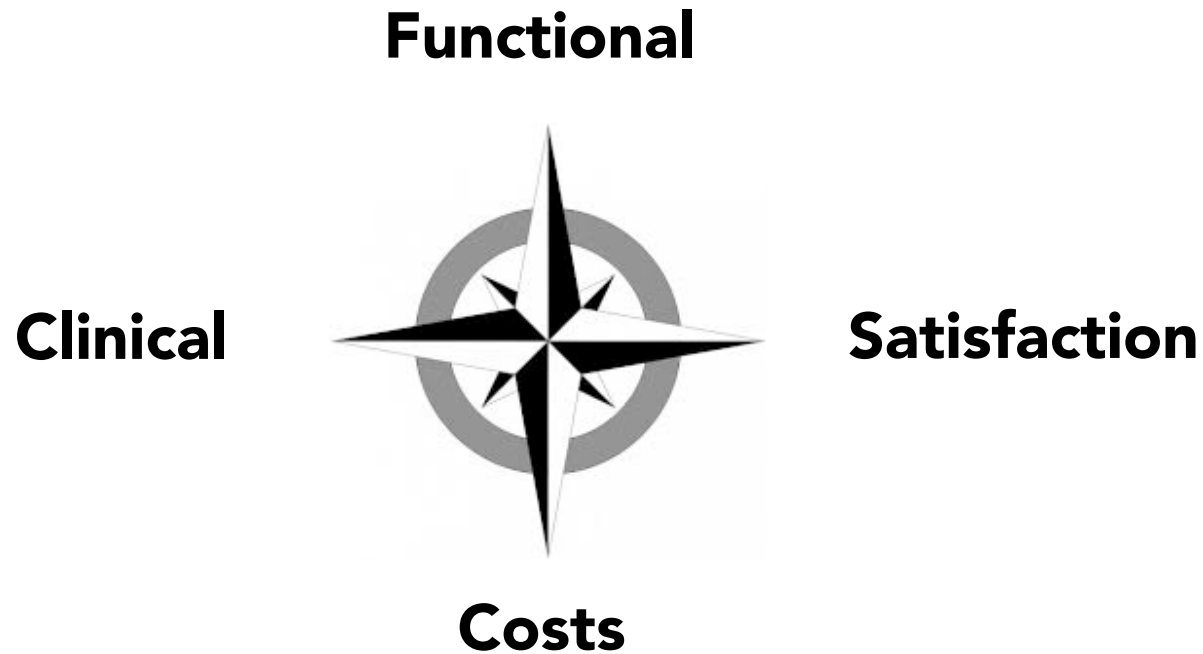


# Evaluation Framework





# Value Compass



Nelson EC, Mohr JJ, Batalden PB, Plume SK. (1996). Improving health care, Part 1: The clinical value compass. *Joint Commission Journal of Quality Improvement*. 22(4):243-58.



## Mixed Methods

### Phase I: AY 2013/14

- Employee Focus Groups
- Leader/Supervisor Interviews
- Policy & Program Assessment (Heart Check)
- Environmental Assessment (CDC TOWE)

### Phase II: AY 2014 - present

- Feasibility Assessment
  - Interviews: Employee & Peer Institutions
  - Claims Data Repository & Analytics Options
- Outcomes Evaluation



## Ph I – Example Findings

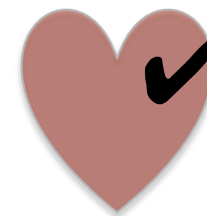


Focus Groups – Faculty & Staff  
Interviews – Leaders / Mid Managers

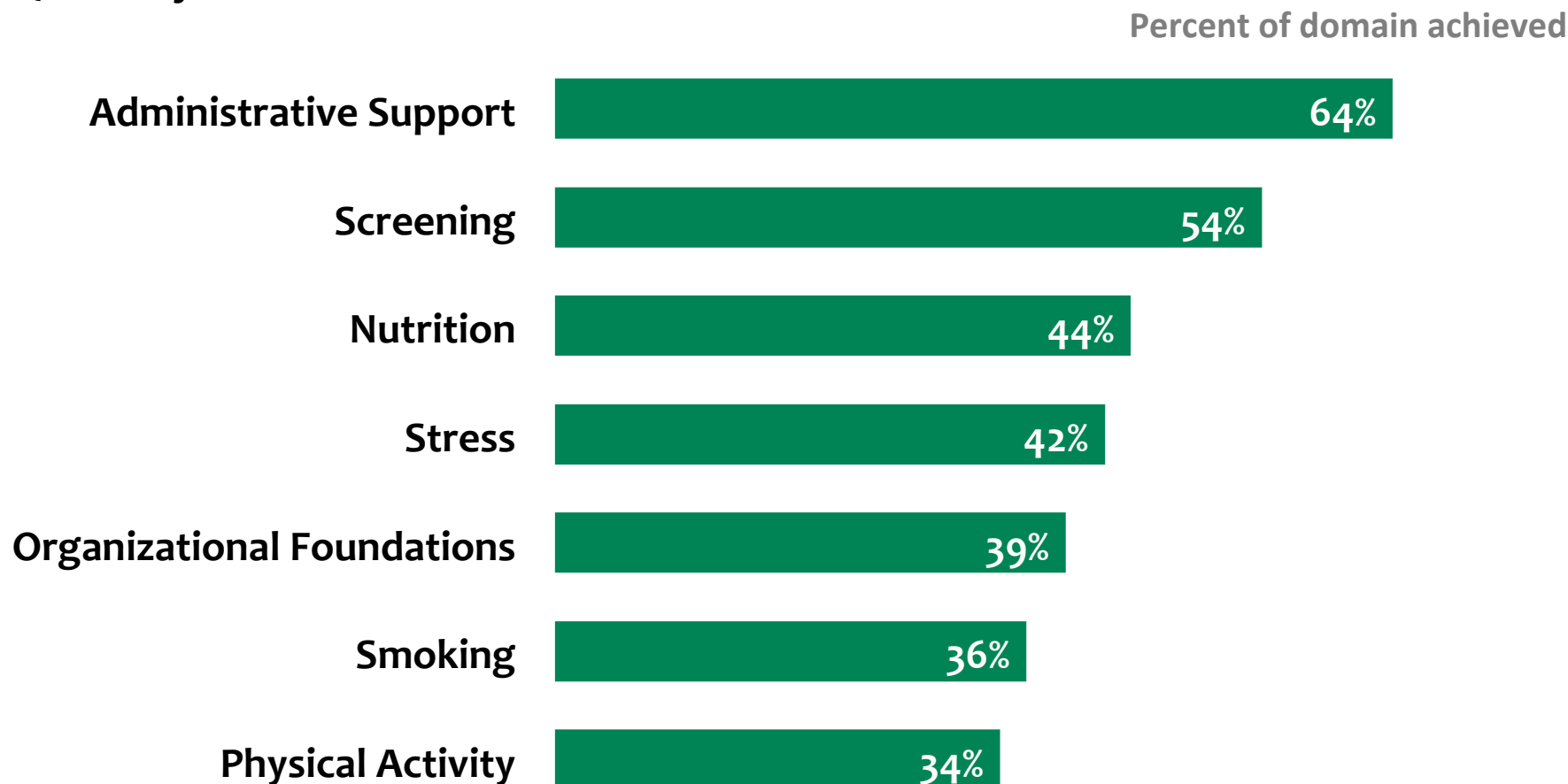
- Past and present engagement
- Perceptions of health & wellness and role of employer
- Barriers & Enablers to participation
- Varied cultural / social environments for health across different employees and settings



# Phase I: Policies & Programs



The Heart Check\* Assessment of Worksite Support  
7 Policy & Wellness domains



\*Version 4.1 New York State Dept. of Health Healthy Heart Program

## Phase 1: Environment



The CDC Tool for Observing Worksite Environment (TOWE)\*  
42 (93%) of employee-occupied buildings & surrounds

	Percent of buildings with feature
Stairwells	98%
Walking path on or adjacent to grounds	93%
Open space/grassy area big enough for physical activity	50%
Bike racks outside	43%
<b>Reminder/signs to take stairs</b>	22%
Vending machines	19%
<b>Signs in building related to</b>	
Diet/Nutrition	24%
Anti-smoking	10%
Other (e.g., mental health)	26%



\*adapted from CHEW: Checklist of Health Promotion Environments in Worksites (Oldenburg et al, 2002)

# Phase 1: Program Data

Benefit or Resource	Number of Participants (percentage if non-repeating)
2012 Biometric screening	2237 (51%)
2012 Health risk assessment survey	2145 (56%)
Field health coaching (since inception)	549
Wellness workshops (since inception)	521
Fitness (wellness) reimbursement (CY 2013)	609 (17%)
2014 Move It Physical Activity Challenge	1607 (37%)
Alumni gym membership – Plus	670 (15%)
Alumni gym membership – Basic	85 (2%)
FLIP classes	955 (21%)
Faculty/Employee Assistance Program	669*
Dartmouth Health Connect Practice	1550*

\*includes employees, spouses, families



## Where we're headed

# Outcomes Evaluation



## Longitudinal Matched Cohort Design





# Feasibility Assessment



Employee Interviews (n=13)

Recruitment and incentives

Inventory of Peer Institutions

Local Employers

Academic Peers

Data Management Vendors





## Feasibility Assessment

Employee Interviews (n=13): Overall support of a longitudinal cohort design

Most (n10) were favorable toward participation

Mixed on the likelihood of others' participation

Financial incentives as motivator for participation

Privacy concerns greater for biometric screening than analysis of health claims data





# Feasibility Assessment

## **Interviews of Peers: Maturity, methods and resources for wellness evaluation**

8 academic institutions

2 local employers

### **Findings:**

Ranged from early stages to well-established evaluation;  
Methods from simple to mixed

Leader buy-in and resources greatest among the well-established employee wellness evaluations





# Feasibility Assessment

Explored options for linking claims data to participation, HRA & Biometric data

Internal, external, and insurer-based options

Many challenges revealed

- Data security concerns

- Claims data not intended for research

- Claims and conditions to include

- Defining Wellness “participation”

- Political will & institutional priorities

- Privacy, trust issues – role of employer in health



## Implications



What answers are most important to program and institutional leaders?

Employee satisfaction?

Program performance?

Return on investment?

Resources (personnel, \$\$, expertise) needed to optimize quality of results?

Is longitudinal assessment supported?



# Options for Outcomes Evaluation

## Bronze

- Biennial incentivized HRA, Biometrics, Climate/Interest survey, TOWE, Heart✓
- No claims data
- Sample: Campus-wide; variable; prone to selection bias
- Answers: Awareness, User satisfaction, Program reach/delivery, Policy/Envir.

## Silver

- Bronze plus aggregated claims data
- Sample: Convenience sample of users and non-users; variable; selection bias
- Answers: Bronze plus Outcomes in health & utilization users to non-users

## Gold

- Silver plus program costs; Measures linked at individual level
- Sample: Cohort representative of total workforce; propensity score matching
- Follow annually; incentivize cohort participants
- Answers: Silver, plus Cost-Effectiveness and program Value





## Conclusions

Academic context can pose unique challenges

Mixed methods capture multi-level change

Employees: attitudes, health behaviors, work ability

Program: costs, offerings, participation

Institution: policies, environment, climate

Best practices address **culture of health and value on investment**





## Where the field is moving...

“It’s time to change the metric for success. Instead of demanding a high ROI, employers should require data supporting **high engagement rates** by workers, **satisfaction** with program components, **population health improvement**, an ability to **attract and retain** top talent, fewer **safety** incidents, higher **productivity**, and perceived **organizational support** for one’s health and well-being. That’s where program evaluations should be focused, not simply on achieving a positive ROI.



*Ron Goetzel*

<http://healthaffairs.org/blog/2014/12/22/the-value-of-workplace-health-promotion-wellness-programs/>





# Acknowledgements

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Other Questions?

Contact CPDE at <http://geiselmed.dartmouth.edu/cpde>

